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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,275	04/24/2000	Richard P. Haugland		8094

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EXAMINER

FREDMAN, JEFFREY NORMAN

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 11/20/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/557,275

Applicant(s)

HAUGLAND ET AL.

Examiner

Jeffrey Fredman

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) 3,5-9 and 11-74 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the inventions of the two groups are not distinct because the inventive compounds are advantageous. This is not found persuasive because the fact that the claimed compounds may be better does not render the groups not distinct, and any asserted superiority is not relevant to the distinctness analysis. Thus, since the restriction is based upon groups which are properly distinct and for which a search burden is present, the requirement is maintained.
2. With regard to the species election, Applicant submitted a corrected species election to elect the compound 4-(6-chloro-2,3,-dihydro-4-methyl(thizolo[4,5-b]pyridin-2-yl)methylidene)-1-methylquinolinium tosylate, which is indicated as being exemplified as compound 40 on page 79 of the specification. As will be noted below, this species is free of the prior art. This species is read upon by claims 1, 2, 4 and 10 as noted by Applicant. Therefore, a search of other species within the genus was performed and the rejection below is the result. Claims 3, 5-9 and 11-74 which are not rejected below are withdrawn as not drawn to the elected species.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

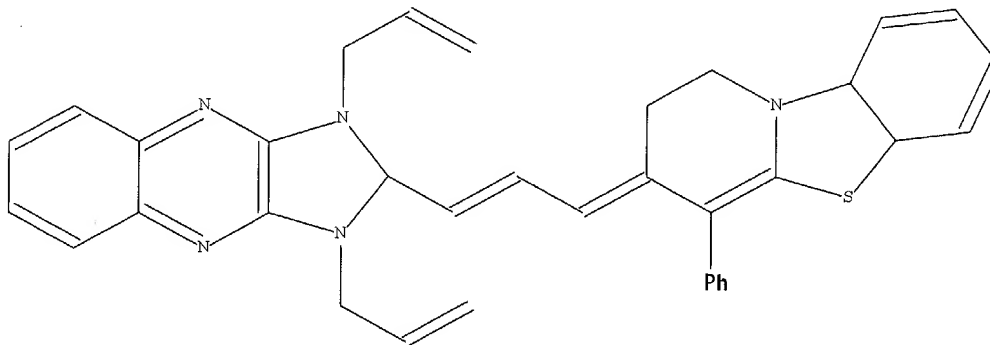
A person shall be entitled to a patent unless –

Art Unit: 1637

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Heseltine et al (U.S. Patent 4,003,750).

Heseltine teaches a compound having the formula:



(see column 12, example 3, lines 55-end).

This compound meets the claim, since there is an A, which represents the atoms necessary to form two fused aromatic rings having 6 atoms in each ring wherein some of the ring atoms are nitrogen,

Where X is selected from the group consisting of  $\text{NR}^{15}$ , with  $\text{R}^{15}$  being an alkyl group with three carbons,

Where all beta is 0 and alpha is 1 so that  $\alpha + \beta = 1$ ,

Where  $\text{R}_2$  is an alkyl group having three carbons,

Where  $n = 1$ ,

Where Y is  $\text{C}=\text{C}$  and  $m+p = 1$

And where the remaining substitutents permit the presence of the cyclic substituents and the aromatic ring. In particular, R3, R4, R5 and R6 are all indicated as being permissive of having a cyclic substituent which may have 1-6 carbons, as well as various alkyl groups which may have 1-6 carbons, which may be substituted.

***Claim Rejections - 35 USC § 103***

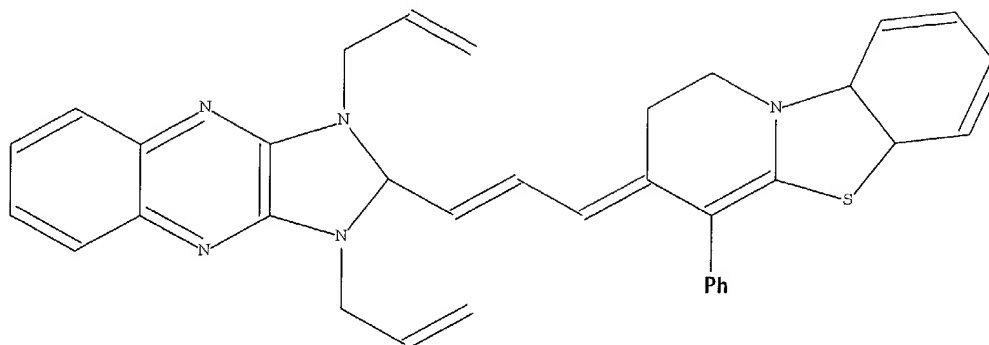
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heseltine et al (U.S. Patent 4,003,750) as applied to claims 1, 2 and 10.

Heseltine teaches a compound having the formula:



(see column 12, example 3, lines 55-end).

This compound meets the claim, since there is an A, which represents the atoms necessary to form two fused aromatic rings having 6 atoms in each ring wherein some of the ring atoms are nitrogen,

Where X is selected from the group consisting of NR<sup>15</sup>, with R<sup>15</sup> being an alkyl group with three carbons,

Where all beta is 0 and alpha is 1 so that alpha + beta = 1,

Where R<sub>2</sub> is an alkyl group having three carbons,

Where n= 1,

Where Y is C=C and m+p = 1

And where the remaining substituents permit the presence of the cyclic substituents and the aromatic ring. In particular, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> are all indicated as being permissive of having a cyclic substituent which may have 1-6 carbons, as well as various alkyl groups which may have 1-6 carbons, which may be substituted.

Heseltine does not exemplify, but does expressly suggest that the five membered ring with a nitrogen may include a sulfur or oxygen atom (see column 6, line 54).

It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to place a sulfur or oxygen in the ring of Heseltine since Heseltine expressly suggests that in the Y' ring, X can be a "sulfur atom" or an "oxygen atom"(see column 6, line 54). An ordinary practitioner would have been motivated to follow Haseltine's suggestion in order to form a variety of dyes which are useful in photographic emulsions.

#### ***Allowable Subject Matter***

8. The elected structure and compound are allowable over the prior art and would be allowed if placed into an independent claim.
9. The following is a statement of reasons for the indication of allowable subject matter: The elected compound, 4-(6-chloro-2,3,-dihydro-4-methyl(thizolo[4,5-b]pyridin-2-yl)methylidene)-1-methylquinolinium tosylate, is not taught or suggested by the cited prior art.

#### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Fredman whose telephone number is 703-308-6568.

The examiner can normally be reached on 6:30-4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 703-308-1119.

Application/Control Number: 09/557,275  
Art Unit: 1637

Page 7

The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



Jeffrey Fredman  
Primary Examiner  
Art Unit 1637

November 15, 2002